

## ON A SUB-FOSSIL HARE FROM A CAVE DEPOSIT AT GODWAN RIVER.

BY DR. LYSTER JAMESON.

In a small collection of animal remains brought from Godwan River, on the Delagoa-Pretoria line, by the late Dr. Karl Wildner of Johannesburg, was the skull of a hare of the genus *Pronolagus*, which seems to occupy a position intermediate between the two living representatives of the genus *P. crassicaudatus* (Is. Geoff.) and *P. ruddi* (Thomas and Schwann), Abstr. P.Z.S. No. 18, p. 23, April, 1905, and P.Z.S., 1905, Vol. I, p. 272, pl. XVI, and which I propose to call *Ronolagus intermedius*, n. sp.

The skull was found in a thin bed of red earth, cemented together into a solid matrix by carbonate of lime, in a lime deposit in the face of a hill which was being worked for commercial lime. I have not yet had an opportunity of examining the spot; but, from Dr. Wildner's description, the deposit is probably the remains of a cavern in the Dolomite, which has become secondarily obliterated by stalagmitic deposits.

Such deposits of stalagmite are being worked for lime in many parts of the Transvaal where the Dolomite formation occurs. Beds of red earth, representing former floors of the caves, are common in these deposits, and in several places (e.g. Wonderfontein, near Bank Station, and Sterkfontein, near Krugersdorp) contain bone braccias that ought to be systematically studied before all these deposits have been passed through the kilns.

The type specimen of this hare consists of a fairly perfect skull and lower jaw.

*Description*: Skull intermediate in size between *P. crassicaudatus* and *P. ruddi*; heavily built. Muzzle broad proximally, relatively and absolutely broader than even in *P. ruddi*.

The frontal bones are lost, but from the contour of the maxillæ and premaxillæ it would appear that the frontal profile was probably more convex than in *P. ruddi*.

Postorbital wings resemble those of *P. ruddi*, but the angle between them and the brain case is narrower.

Anterior shoulder of the zygoma not produced forward as in *P. ruddi*, but not so acute, and with a more obtuse angle between itself and the nose.

The palatal foramina resemble those of *P. crassicaudatus*, but are broader in the middle, and slightly constricted posteriorly by their inwardly directed edges.

Bullæ very large, as in *P. crassicaudatus*.

Incisors deeply grooved. Upper molars resemble those of *P. ruddi*, in that the uncrenulated parts of the anterior enamel walls of the posterior laminae extend about half way across the tooth, and further in having the crenulated outer parts of the posterior enamel walls of the anterior laminae and of the anterior enamel walls of the posterior laminae about equally developed.

The anterior wall of the anterior lower premolar is only faintly crenulated. The lower molars are not well preserved.

Dimensions : Compared with those of *P. ruddi* (Thomas, *loc. cit.*) and *P. crassicaudatus curryi* [Thomas, *Ann. Mag. Nat. Hist.* (7), Vol. X, 1902, pp. 244-6] :—

<i>Skull.</i>	<i>Pronolagus intermedius.</i>	<i>P. crassicaudatus curryi.</i>	<i>P. ruddi.</i>
Basilar length .. ..	*70 mm.	63 mm.	72 mm.
Zygomatic breadth.. ..	42 mm.	39 mm.	40 mm.
Interorbital breadth .. ..	(about) 18 mm.	13·2 mm.	16 mm.
Intertemporal breadth .. ..	„ 14 mm.	11·8 mm.	13·3 mm.
Diastema .. ..	30 mm.	26·5 mm.	30 mm.
Palatal foramina .. ..	28 9·5 mm.	25 7·5 mm.	26 8·5 mm.
Palatal bridge .. ..	10 mm.	7 mm.	9·7 mm.
Breadth of muzzle at base	24 mm.	†19 mm.	†23 mm.

The posterior nares are narrow, as in other members of the genus (6 mm.), and the contours of the lower jaw also conform to the<sup>3</sup> pronolagus type.

This skull then belongs<sup>†</sup> to a hare, which, in its cranial characters, was more heavily built than either *P. ruddi* or *P. crassicaudatus*. It agreed with the former species in its broad arch nose and in the relations of the postorbital processes, the anterior shoulder of the zygoma-root, and the upper molars.

On the other hand the palatal foramina, the incisors, and the large bullæ are characters which it shares with *P. crassicaudatus*.

Transvaal University College,  
September, 1907.

\* As the basioccipitæ could not be seen the skull was measured from the paroccipital process forward.

† Measured from Thomas' figures.